

Remarks

In the Action, claims 1-35 were pending, with claims 1-31 having been elected for prosecution. Upon entry of the present paper, claims 1-31 remain pending, non-elected claims 32-35 and claim 30 are canceled without prejudice or disclaimer, and new claims 36-41 are added. These new claims do not introduce new matter to the application, as support may be found, among other places, at pages 26-29 of the specification.

The Action rejects claims 19-21, 24 and 29-31 under 35 U.S.C. §102(b) as being anticipated by *Ford et al.* (U.S. Pat. No. 5,484,293). Claims 1, 3-12, 16-17 and 25-28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the alleged combination of *Ford et al.* and *Hoerner et al.* (U.S. Pat. No. 5,751,134). Claims 2 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the alleged three-way combination of *Ford et al.*, *Hoerner et al.*, and *Stevens, III* (U.S. Pat. No. 5,769,643). Claims 13-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the alleged three-way combination of *Ford et al.*, *Hoerner et al.*, and *Prewitt* (U.S. Pat. No. 6,421,525). Claims 22-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the alleged combination of *Ford et al.* and *Prewitt*. Applicant respectfully addresses these rejections below, beginning with the anticipation allegations surrounding claims 19-24.

Independent Claim 19, and Dependent Claims 20-24 and 38-41

In rejecting claims 19-21 and 24, the Action alleges that each and every recited feature is shown by *Ford et al.* Action, p. 2. The *Ford et al.* patent describes a mobile learning laboratory that allows a student to conduct science experiments by him/her self in the absence of a teacher. See, e.g., *Ford et al.*, col. 5, lines 5-6. To accomplish this, the *Ford et al.* laboratory includes, for example, laboratory balances, microscopes and thermometers for conducting the science

experiments (col. 7, lines 5-9); snacks to eat (col. 7, lines 13-14); and a personal computer (col. 7, lines 1-5). The *Ford et al.* laboratory lacks, however, a number of features recited in these rejected claims.

For example, independent claim 19 recites, among other features, “a server on one of said shelves, wherein said server communicates with said laptop computers via wireless communication.” The *Ford et al.* patent fails to teach or suggest any such feature. Indeed, in rejecting other claims, the Action appears to admit that *Ford et al.* does not show wireless communication: “Ford et al. does not specifically disclose, nor Hoerner et al. teach, that the server communicates with portable computers via wireless communications” Action, p. 7. Applicants agree that *Ford et al.* fails to teach or suggest the recited use of wireless communication. This simple fact is verified by the *Ford et al.* figures, which do not show any structures for wireless communication. See, e.g., *Ford et al.* Figs. 4, 5. The *Ford et al.* specification is similarly devoid of any teaching of wireless communications.

This, however, is not *Ford et al.*’s only deficiency. In addition to “a server on one of said shelves, wherein said server communicates with said laptop computers via wireless communication,” claim 19 also recites “a plurality of laptop computers, stored on one or more shelves in said cart.” *Ford et al.* makes no suggestion at all of having such a plurality of laptop computers, or of having a server that communicates with those laptop computers.

Regarding the plurality of laptop computers recited in claim 19, the Action cites to *Ford et al.* Fig. 5. Action, p. 2. However, this cited figure does not describe or depict any laptop computer at all, much less a plurality of them. At best, *Ford et al.* element 17 is an “interactive device” that may be a “personal computer with color graphics screen, loudspeakers and microphone, a printer capable of producing text and graphics, and a CD-ROM drive” (col. 7,

lines 1-4), but there is no disclosure of whether this device is a laptop computer, and furthermore only one such device is present in the laboratory. There is no teaching or suggestion in *Ford et al.* for having a plurality of laptop computers as recited.

Regarding the claim 19 server, the Action cites to *Ford et al.*, col. 3, lines 55-61. Action, p. 2. However, that portion of the *Ford et al.* patent describes other systems besides the *Ford et al.* laboratory, where one of the other systems includes a central computer that “acts as a sort of file server.” *Ford et al.*, col. 3, lines 60-61. *Ford et al.* never once mentions, or even hints, that this other system’s “server” should be included in *Ford et al.*’s laboratory, or that the laboratory is to be modified to incorporate features from the other prior art systems that *Ford et al.* mentions. *Ford et al.* fails to teach or suggest “a server on one of said shelves, wherein said server communicates with said laptop computers via wireless communication,” as recited in claim 19.

For at least these reasons, Applicants submit that independent claim 19 distinguishes over the cited patents, and is in condition for allowance. Claims 20-24 and 38-41 depend from claim 19, and are allowable for at least the same reasons as claim 19, and further in view of the various advantageous and novel features recited therein. For example, dependent claim 22 recites “[t]he system of claim 21, wherein said first computer is a teacher computer, and said second computer is a student computer.” In rejecting this claim, the Action concedes that “Ford et al. does not disclose that a first computer is a teacher computer and a second computer is a student computer.” Action, p. 9. The Action then alleges that *Prewitt* teaches such computers, and alleges that it would have been obvious to one of ordinary skill to combine the teachings of *Prewitt* with those of *Ford et al.* Id.

Prewitt describes a computer system that is used on a school bus to educate children while on their way to/from school, or on field trips. *See, e.g., Prewitt*, col. 1, lines 27-28; col. 2, lines 27-34; and Figs. 2-3. To accommodate the school bus environment, the *Prewitt* system includes ruggedized equipment to sustain the vibrations caused by the school bus (col. 3, lines 9-11); an ambient light sensor to control the brightness of the display based on the amount of ambient light (col. 3, lines 35-39); an audio amplifier to make the audio volume louder if the ambient noise is higher (col. 3, lines 39-48); an audio cutoff switch to allow the bus driver to disable all audio (col. 3, lines 61-64); a global positioning system (GPS, col. 4, lines 19-30); and a specialized power supply to power the system from the school bus' existing electrical system (col. 4, lines 31-34). *Prewitt* offers no suggestion that laboratory experiments should be conducted using its system.

No one of ordinary skill in the art would read *Prewitt* and *Ford et al.* and think to combine their teachings in the manner alleged. *Ford et al.* has nothing to do with school buses, and *Prewitt* never suggests that it would be desirable to also run laboratory experiments on its school buses. Indeed, it is difficult to imagine a student attempting to use, for example, the *Ford et al.* microscope on the *Prewitt* school bus on the way home from school. It is also difficult to imagine the *Ford et al.* laboratory needing (or even caring about) the ambient light, ambient noise, GPS, and audio cutoff features described in *Prewitt*. The alleged combination simply would never occur to anyone of ordinary skill reading these references, and Applicants respectfully submit that there is no proper motivation for the combination that the Action has proposed.

As another example, dependent claim 24 recites "[t]he system of claim 21, wherein said second computer roams between a communication coverage area of said server of said second

cart and a communication coverage area of said server of said first cart.” The Action cites *Ford et al.* col. 8, lines 23-34, to show this feature. That section, however, is completely devoid of any mention of a roaming computer. Instead, that portion merely describes how various elements are plugged together on a single laboratory.

As another example, new claim 38 recites “[t]he system of claim 19, wherein said plurality of laptop computers are for distribution to a plurality of students in a classroom, and are stored on said one or more shelves when not in use by said students.” None of the cited patents teach or suggest this claim 38 system. New claim 41 recites “[t]he system of claim 19, wherein said plurality of laptop computers are removably stored on said one or more shelves.” As noted above, *Ford et al.* emphasizes the fact that its system is “permanently preconfigured,” and makes no mention at all about removing any laptop computers. See, e.g., col. 4, line 67 to col. 5, line 1.

Independent Claim 29, and Dependent Claims 31 and 36

The Action rejected independent claim 29, alleging that each and every recited feature was shown in *Ford et al.* Claim 29 recites, among other features, “a portable case having a lid, and configured to store a plurality of portable computers.” The Action refers to *Ford et al.* Fig. 3 to show this feature. Action, p. 3. To the contrary, that figure makes no mention at all regarding the laboratory being configured to store a plurality of portable computers.

Furthermore, independent claim 29 has been amended to recite, among other features, “a network server, located within said case, wherein said network server communicates with said plurality of portable computers when said portable computers are removed from said portable case.” *Ford et al.* fails to teach or suggest any such feature. In fact, *Ford et al.* does not ever contemplate the removal of the devices, such as interface device 17, from the laboratory itself. Indeed, since *Ford et al.* makes clear that its laboratory is permanently preconfigured, the patent

even teaches away from removing portions of the system. See, e.g., col. 4, line 67 to col. 5, line 1. Indeed, the figures depict device 17 as a large, immobile portion of the system. See, e.g., Fig. 3.

None of the other applied references overcomes these deficiencies in *Ford et al.*, and Applicants respectfully submit that amended independent claim 29 distinguishes over the cited references, and is in condition for allowance. Claims 31 and 36 depend from claim 29, and are allowable for at least the same reasons as claim 29, and further in view of the various advantageous and novel features recited therein. For example, newly-added claim 37 recites “[t]he system of claim 29, wherein said network server communicates with said portable computers via wireless communication, and said portable case further includes a wireless communication antenna integrally formed with said case.”

Independent Claim 1, and Dependent Claims 2-18

In rejecting claims 1, 3-12, and 16-17, the Action concedes that various features recited therein are absent from *Ford et al.* The Action relies on *Hoerner et al.* to address these deficiencies, but as discussed below, the alleged combination (even assuming it is proper) fails to teach or suggest the recited features.

Turning to amended claim 1, that claim recites, among other features, “a battery storage area in said portable cart, storing a plurality of spare rechargeable batteries for said computers.” The Action concedes that “*Ford et al.* does not specifically disclose a battery storage area containing batteries rechargeable from the power supply.” Action, p. 4. The Action then alleges that such a feature is shown by *Hoerner et al.*, and relies on a combination of *Ford et al.* and *Hoerner et al.* to reject claim 1. *Id.*

Hoerner et al. relates to a system for controlling how batteries are recharged, and for providing a user with a gauge (referred to as a “gas gauge”) to tell the user how much energy is in the battery. See, e.g., *Hoerner et al.* Fig. 4 (gauge) and Figs. 5-9 (charging processes). *Hoerner et al.*’s particular process of recharging a battery involves steps such as measuring the battery’s temperature to control the recharge process (col. 5, lines 52-64); and making sure to completely discharge the battery during the process (col. 3, lines 11-14).

The *Hoerner et al.* invention may be useful for systems that have rechargeable batteries. *Ford et al.* has no rechargeable batteries. *Ford et al.* has no batteries at all. Indeed, the very first step in the *Ford et al.* process is “[p]lug power cord into wall socket.” *Ford et al.*, Fig. 6 (emphasis added). *Hoerner et al.* offers a solution to a problem that *Ford et al.* does not have, and there is simply no reason why anyone of ordinary skill in the art would read these two patents and decide to combine them in the manner suggested by the Action. Applicants submit that there is no proper motivation for the alleged combination.

Even assuming, *arguendo*, that the alleged combination is a proper one, the resulting combination still would not teach or suggest the claim 1 system. As amended, claim 1 recites “a battery storage area in said portable cart, storing a plurality of spare rechargeable batteries for said computers.” *Hoerner et al.* says nothing about spare batteries, and offers no suggestion to modify the *Ford et al.* laboratory to somehow include a battery storage area as recited in the claim.

None of the other cited references, *Stevens III* and *Prewitt*, can overcome the deficiencies identified above (assuming they can even be properly combined in the first place). Applicants submit that amended independent claim 1 distinguishes over the art of record, and is in condition for allowance. Claims 2-18 depend from claim 1, and are allowable for at least the same reasons

as claim 1, and further in view of the various advantageous and novel features recited therein. For example, claim 7 recites “[t]he system of claim 1, wherein said battery storage area is a drawer located above said one or more shelves.” The Action alleges that *Ford et al.*, Fig. 1, shows the recited drawer, with the exception of a drawer having batteries. Action, p. 5. The claim 7 drawer is located above said one or more shelves. This placement of the drawers may be advantageous for heat dissipation purposes. Looking at the cited *Ford et al.* Fig. 1, Applicants see no such drawers.

As another example, claim 13 recites “[t]he system of claim 1, wherein said plurality of computers include student computers, and wherein said server is communicatively coupled to a teacher computer.” The Action concedes that “Ford et al. does not disclose nor does Hoerner et al. teach that the student computers are communicatively coupled to a teacher computer.” Action, p. 8. To address this deficiency, the Action introduces yet another patent into the mix: *Prewitt*.

There simply is no proper reason why anyone of ordinary skill would choose to make the alleged three-way combination of *Ford et al.*, *Hoerner et al.*, and *Prewitt*. *Hoerner et al.* relates to an improved way to recharge batteries, but *Ford et al.* has no batteries at all. *Prewitt* relates to a system for use on a school bus, but *Ford et al.* makes no mention at all of using its system on a school bus. Indeed, and as discussed above, it is nonsensical to imagine a student attempting to use the *Ford et al.* laboratory system, which includes a microscope, on the *Prewitt* school bus. It is equally nonsensical to imagine the *Ford et al.* laboratory needing the ambient noise or GPS features used in *Prewitt*.

Independent Claim 25, and Dependent Claims 26-28 and 37

Amended independent claim 25 recites, among other features, “a plurality of laptop computers, stored on one or more shelves in said cart; and a plurality of rechargeable batteries for said laptop computers, stored in a battery area of said cart, wherein said batteries are recharged during storage in said cart.” The Action rejects claim 25 based on the alleged combination of *Ford et al.* and *Hoerner et al.* Action, p. 4.

At the outset, and as discussed above, Applicants note that there is no proper motivation for combining *Hoerner et al.* (which relates to recharging batteries) with *Ford et al.* (which has no batteries). Even assuming, *arguendo*, that such a combination would have occurred to one of ordinary skill, the resulting combination still would not have resulted in the claim 25 system. For example, claim 25 recites “a plurality of laptop computers, stored on one or more shelves in said cart.” The Action cites *Ford et al.* Fig. 5 to show the plurality of laptop computers. Action, p. 4. *Ford et al.* Fig. 5 does not show any such plurality of laptop computers. The only components shown there are phone line connector 34, phone line connector spool 50, modem 51, interactive device 17, signal socket 43, power/signals unit 42, signal connection 52, power connection 53 and experimental device 19 (depicted as a scale). *Ford et al.* Fig. 5, col. 6, lines 1-25. There is only one of each of those elements, and no plurality of laptop computers described, or even suggested, there. The addition of the *Hoerner et al.* battery-charging system would not suddenly convert one of those *Ford et al.* devices into a plurality of laptop computers.

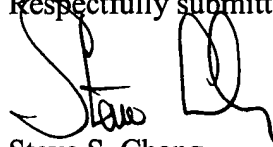
Claim 25 distinguishes over the applied references, and is in condition for allowance. Claims 26-28 and 37 depend from claim 25, and are allowable for at least the same reasons as claim 25, and further in view of the various advantageous and novel features recited therein. For example, new claim 37 recites “[t]he system of claim 25, wherein said battery area includes a

plurality of molded slots to assist in the proper seating of said batteries.” None of the cited references show such features.

Conclusion

For at least the reasons state above, Applicants submit that the pending claims 1-29, 31, and 36-41 are distinguishable over the applied references, and are in condition for allowance. If the Examiner feels that further discussion and/or amendment is necessary to place the application in condition for allowance, the Examiner is invited to telephone Applicants’ undersigned representative at the number appearing below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Steve S. Chang". The signature is stylized with a large "S" and a cursive "C".

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